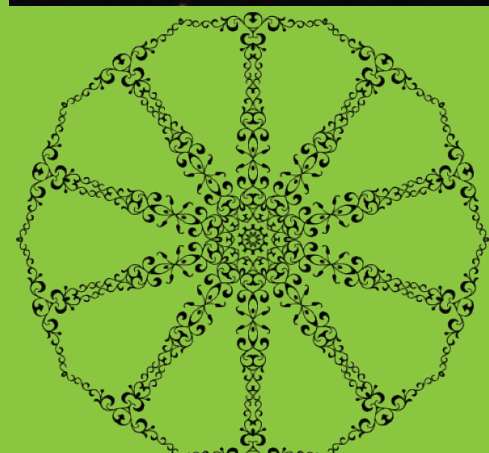
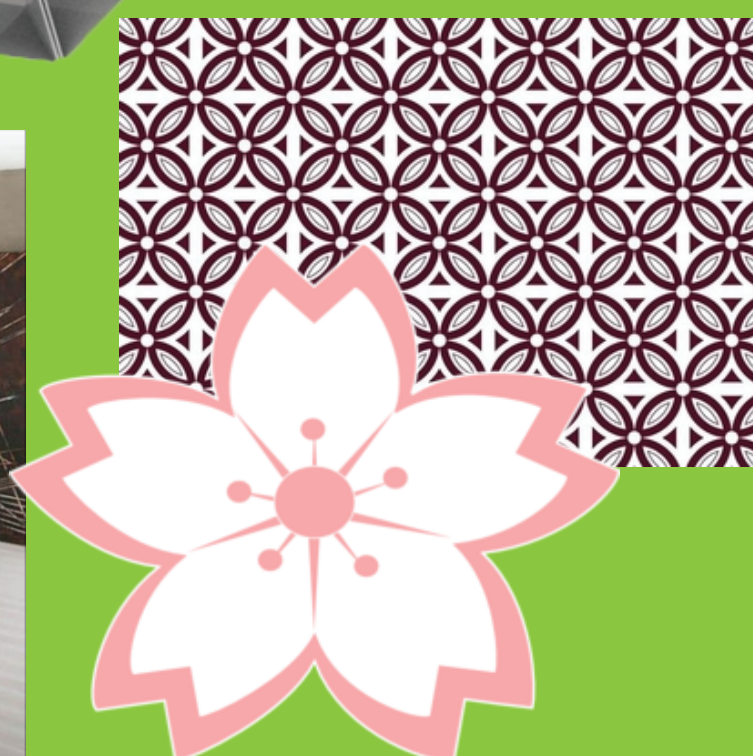
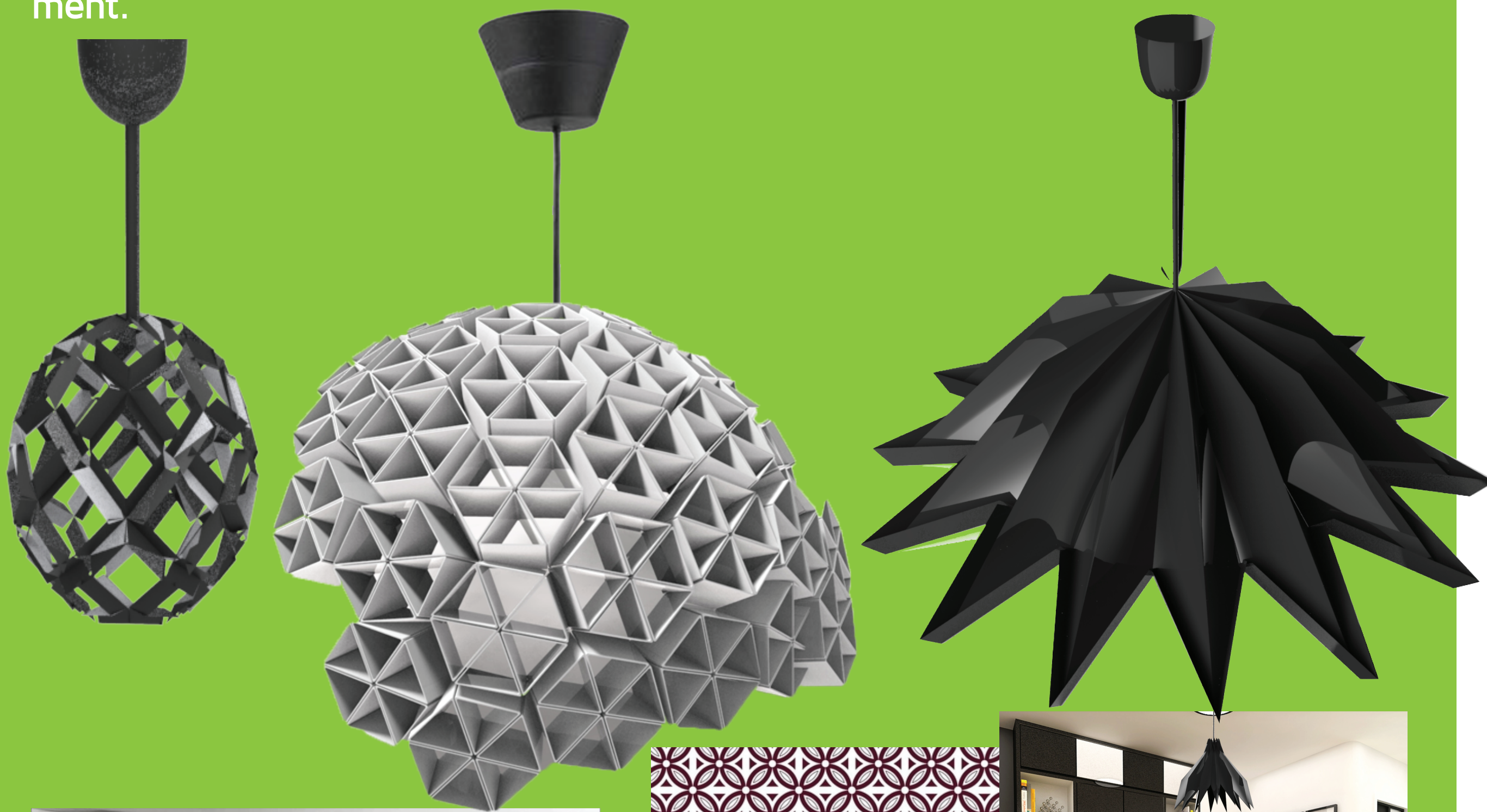


# Digital Morphogenic Diagrammatic DIY Lighting

## Abstract

This project is to work on innovative form which is to explore the subject of 'supersurfaces' which emphasizes of paper folding as a method of form generation. Associated with diagrammatic technique and digital morphogenesis, prolifically materializing in the projected and the built through continuity, curvature, smooth layering and manipulations of the ground which was conceptualized Deleuzian ontology of the 'the fold'. This project required to investigate paperfolds as physical artifacts to design a lighting. Folding and paper was used as a starting technique and material which involve the three-dimensional reproduction of, geometric patterns on various scales. The used of theory in knowledge building in reflective practice embedded with the theory of semantics showed that design-driven approach can be achieved for radical innovating of product design and development.



## Methods

KNOWLEDGE BUILDING THEORY

Theory of Semantics

Informs, guides, provides concepts by deduction

contributes to enhance by induction

"Reflective Practice" design of (experimental) objects by abduction

## Conclusions

The variety application of 'supersurfaces' technique and material, could create series of everyday objects design according to design problem. The design created reflects customer need, technically and economically feasible. This project could be developed further with the collaboration of other academics from other disciplines and the end results will lead to other innovative projects in design problem.



DR. PUTERI FADZLINE BT MUHAMAD TAMYEZ  
WAN ZAIYANA MOHD YUSOF  
Universiti Malaysia Pahang

## Introduction

What are the factors that could be identified in relation to the Design-Driven innovation Framework?

The usefulness of design-driven innovation as excellent systems applied by the Italian companies will only to be applied on firms that has a stable and diffuse technological competencies. The adoption of design-driven innovation is beneficial to firms that are already reputable in the market and credible along with strong complementary assets and this type of innovation is only suitable for young unknown designer to channel through established and credible firm for a better adoption to design-driven innovation.

Therefore, it is important to re-evaluate and complement the theory to cater the emotion, cultural and social needs of users.

## Objectives

- To determine several design-driven strategies proposed to intensify the radically innovating framework.
- To test the design-driven innovation theory in reflective practice design of experimental objects to design an innovative product.

## Significance of Study

- To provide valuable information in understanding and formulating ways to enrich the radical design innovation.
- To provide an organization with a knowledge-based to design and implement more practical methods in radical innovation.

## Literature Review and Theoretical Framework

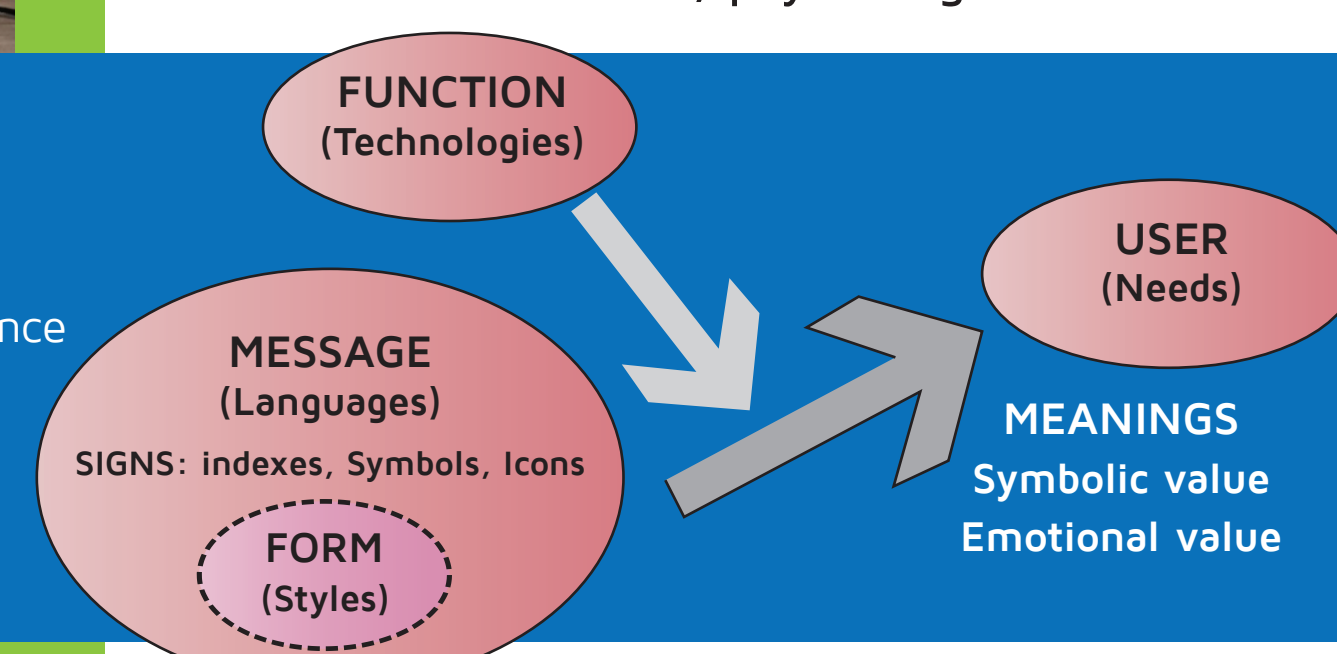
### Theory of Semantic

Karjalainen, Toni M. (2014), with his research paper titled, "Semantic knowledge in the creation of brand specific product design". Stated that, when nurturing and creating brand specific, manifestation of brand identity can be used in product design. A product with strategic association is so of central interest by the act of 'encoding'. He added that to create a strategic design language, the ability to judge specific solution for the brand and a very firm knowledge of the products are needed.

### Theory of Radical Design-driven Innovation

A design-innovation should be able to interpret the meaning that a customer gives to products and this depends on the cognitive schemes and sociocultural context of customers, filtered through individual and cultural parameters.

Verganti (2010) asserts that people do not buy products but meanings. The design-driven framework (Verganti, 2003) enhances and elaborates the concept of form and additionally it considers the symbolic and emotional values of a product. Hence, firms must find ways to create products that are beyond features of functionality or aesthetics and comprehend the meanings that consists of emotional, psychological and socio-cultural reasons.



## Hypotheses Development

- There is a significant relationship between divergence and transformation stage in design process with design-driven innovation.
- There is a significant relationship between reflective practice with design-driven innovation.